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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/982,826	10/22/2001	Ran Bronstein	S02/33	8280

7590 07/13/2004  
DR. D'VORAH GRAESER  
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EXAMINER

CHUNG, DANIEL J

ART UNIT	PAPER NUMBER
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2672

DATE MAILED: 07/13/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/982,826

Applicant(s)

BRONSTEIN ET AL.

Examiner

Daniel J Chung

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 05 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4,6,8-10 and 12-14 is/are rejected.
- 7) ☒ Claim(s) 5,7 and 11 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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### **DETAILED ACTION**

Claims 1-14 are presented for examination. Claims 3-14 have been added by the amendment filed on 5-5-2004. This office action is in response to the amendment filed on 5-5-2004.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4,6,8-10 and 12-14 are rejected under 35 U.S.C. 102(e) as being anticipated by French et al. (6,369,819)

Regarding claim 1, French et al discloses that the claimed feature of a method for mapping data to a multi-spline model, the data being expressed in spatial coordinates, the method comprising: (a) constructing a single multi-spline tree [i.e. "a scene graph"] from a plurality of splines; (b) converting a spatial coordinate of the data to a time-based coordinate [i.e. "temporal attributes"]; and (c) mapping each point of the data to a point on said multi-spline model at least

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partially according to said time-based coordinate. (See Abstract, Fig 1, Fig 2, col 3 line 45-col 6 line 24)

Regarding claim 2, French et al discloses that comprising: (d) determining a location in the data by navigating through said multi-spline model; and (e) transmitting at least a portion of the data according to said location. (See Fig 2, col 3 line 58-col 6 line 24)

Regarding claim 3, French et al discloses that multi-spline tree features a plurality of nodes, and each of nodes comprises a spline. (See Fig 2, col 3 line 58-col 4 line 2)

Regarding claim 4, French et al discloses that child spline of each spline maintains a path of spline with continuity. (See Abstract, col 4 line 3-col 4 line 63)

Regarding claim 6, French et al discloses that determining root node, determining distance, locating new spline and expanding branch are repeated until a goal is reached. (See col 3 line 58-col 6 line 24)

Regarding claim 8, French et al discloses that assigning each point of data to a branch on multi-spline tree; and determining correct parameters for each point of data. (See col 3 line 58-col 6 line 24)

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Regarding claim 9, French et al discloses that determining correct parameters comprises determining the time on spline at point, the angle around spline at point and the radius between point and spline at time. (See col 3 line 58-col 6 line 24)

Regarding claim 10, French et al discloses that selecting a solution wherein radius is minimal. (See col 3 line 58-col 6 line 24)

Regarding claim 12, French et al discloses that X-ray simulation data. (See col 3 line 10-28)

Regarding claim 13, French et al discloses that data comprises three-dimensional data, wherein three-dimensional data is represented in XYZ coordinates [12] and can be analyzed according to time ["temporal attributes"]. (See Fig 1)

Regarding claim 14, French et al discloses that three-dimensional data comprises at least video data [16]. (See Fig 1)

***Allowable Subject Matter***

Claims 5,7 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowable subject matter: The present invention is directed to method for rapid transfer of data with multi-spline model. The above identified claims include the uniquely distinct features "determining a root node; determining a distance between a new spline and existing splines in tree; locating new spline on a branch of tree, in an appropriate location with regard to a time parameter of new spline; and expanding branch according to a derivate of branch and new spline." The closest prior art, French et al (US 6,266,053) discloses a similar system, either singularly or in combination, fail to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

***Response to Arguments/Amendments***

Applicant's arguments with respect to claims 1-2 have been considered but are moot in view of the new ground(s) of rejection. In response to the applicant's arguments, Applicant's arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references. Furthermore, In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e. "traversal of the multi-spline tree is equivalent to movement in time", "the use of a spline for the representation of temporal changes" in Remarks p.10 line 19-25) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory

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action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Chung whose telephone number is (703) 306-3419. He can normally be reached Monday-Thursday and alternate Fridays from 7:30am- 5:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael, Razavi, can be reached at (703) 305-4713.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

**(703) 872-9306 (Central fax)**

**(703) 872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121

Crystal Drive, Arlington, VA, Sixth Floor (Receptionist).



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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

djc  
July 5, 2004

A handwritten signature in black ink, appearing to read 'Matthew Luu', with a stylized flourish at the end.

**MATTHEW LUU**  
**PRIMARY EXAMINER**